



BUCKET NO.: ISPS-2000

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Ole Buchardt, et al.

Application No.: 10/657,600

Filing Date: September 8, 2003

For: PEPTIDE NUCLEIC ACIDS

Confirmation No.: Not yet assigned

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

DATE OF DEPOSIT:

October 7, 2003

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID, ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE UNITED STATES PATENT AND TRADEMARK OFFICE, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450.

Elizabeth A. McLoud

TYPED NAME: Elizabeth A. McLoud

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).



In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in § 1.491, before the mailing date

of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

☐ In accordance with § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, therefore:

☐ Certification in Accordance with § 1.97(e) is attached; or

☐ The fee of **\$180.00** as set forth in § 1.17(p) is attached.

☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:

☐ Certification in Accordance with § 1.97(e) is attached;
or

☐ The fee of **\$180.00** as set forth in § 1.17(p) is attached.

☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of **\$180.00** as set forth in § 1.17(p).

☐ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.

- ☒ Copies of references listed on the attached Form PTO-1449 are enclosed herewith
- ☐ Copies of references listed on the attached Form PTO 1449 are not required to be submitted pursuant to the June 30, 2003 recent revisions to 37 CFR § 1.98(a)(2)(i).

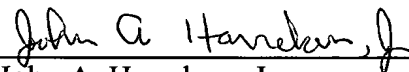
EXCEPT THAT:

- ☐ In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.
- ☒ In accordance with § 1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application:
- ☒ Copies of references **1-25 and 63-73** listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. **08/108,591 now U.S. Patent 6,395,474**, filed **November 22, 1993**; copies of references **26-62** listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. **08/468,719**, filed **June 6, 1995**.

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- ☐ The relevance of those listed references which are not in the English language is as follows:
- ☒ There are no listed references which are not in the English language.

Date: October 7, 2003

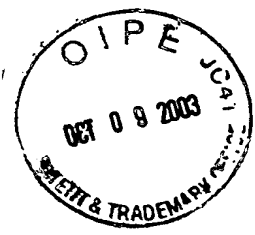


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Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office	Docket No. ISPS-2000		Application No. 10/657,600	
	Applicant Ole Buchardt, et al.			
	Filing Date September 8, 2003		Group Not Yet Assigned	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)				
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	3	Brady et al., "Large-Scale Synthesis of a Cyclic Hexapeptide Analogue of Somatostatin," <i>J. Org. Chem.</i> , 52:764-769, 1987.		
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	48	Nielsen, P.E., et al., "Peptide nucleic acids (PNA): Potential antiviral agents," <i>Intl. Antiviral News</i> , 1993 , 1, 37-39
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	50	Nielsen, P.E., "Peptide nucleic acid (PNA): a model structure for the primordial genetic material?," <i>Org. Life Evol. Biosphere</i> , 1993 , 23, 323-327
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	51	Nielsen, P.E., "Peptide nucleic acid (PNA). A DNA mimic with a peptide backbone," <i>Bioconjugate Chem.</i> , 1994 , <i>5</i> , 3-7		
	52	Nielsen, P.E., "Sequence-specific transcription arrest by peptide nucleic acid bound to the DNA template strand," <i>Gene</i> , 1994 , <i>149</i> , 139-145		
	53	Orum, et al., "Single base pair mutation analysis by PNA directed PCR clamping," <i>Nucleic Acids Res.</i> , 1993 , <i>21(33)</i> , 5332-5336		
	54	Parkanyi, C., et al., "Synthesis of polymethylene chain-bridged 6-substituted 8-azapurines and related compounds," <i>Collect. Czech. Chem. Comm.</i> , 1991 , <i>56</i> , 2382-2388		
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	57	Rose, D.J., "Characterization of antisense binding properties of peptide nucleic acids by capillary gel electrophoresis," <i>Anal. Chem.</i> , 1993 , <i>65(24)</i> , 3545-3549		
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	59	Simon, et al., "Peptoids: A mudlar approach to drug discovery," <i>Proc. Natl. Acad. Sci. USA</i> , 1992 , <i>89</i> , 9367-9371		
	60	Takemoto, et la., "Synthetic nucleic acid analogs preparation and interactions," <i>Adv. Polym. Sci.</i> , 1981 , 1-51		
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	61	Takemoto, K., "Recent problems concerning functional monomers and polymers containing nucleic acid bases," <i>Polymeric Drugs, Academic Press, New York, Donaruma, et al. (Eds.), 1978, 103-129</i>		
	62	Wittung, et al., "DNA-like double helix formed by peptide nucleic acid," <i>Nature, 1994, 368(6471), 561-563</i>		
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Examiner Initial		Document No.	Date	Name	Class	Subclass
	63	5,034,506	07/1991	Summerton, et al.	528	391
	64	5,166,315	11/1992	Summerton, et al.	528	406
	65	5,340,716	08/1974	Ullman, et al.	435	6
	66	5,539,082	07/1996	Nielsen, et al.	530	300
	67	5,705,333	01/1998	Shah, et al.	435	6
	68	5,719,262	02/1998	Buchardt, et al.	530	300
	69	5,773,571	06/1998	Nielson, et al.	530	300
	70	5,786,461	07/28/98	Buchardt, et al.	536	18.7

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
	71	WO 86/05518	25/09/86	PCT		
	72	WO 90/02749	22/03/90	PCT		
	73	WO 92/20702	26/11/92	PCT		

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